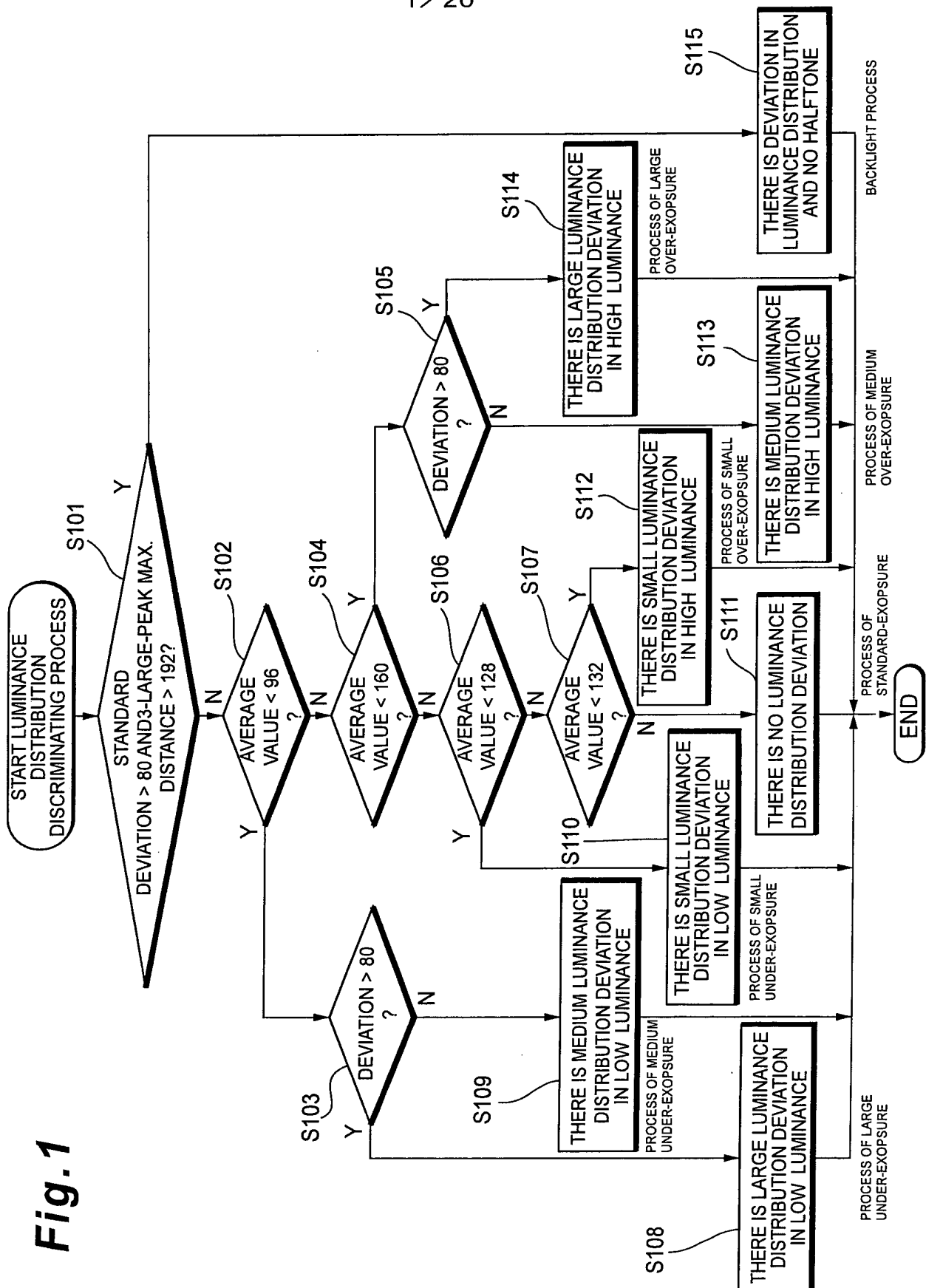


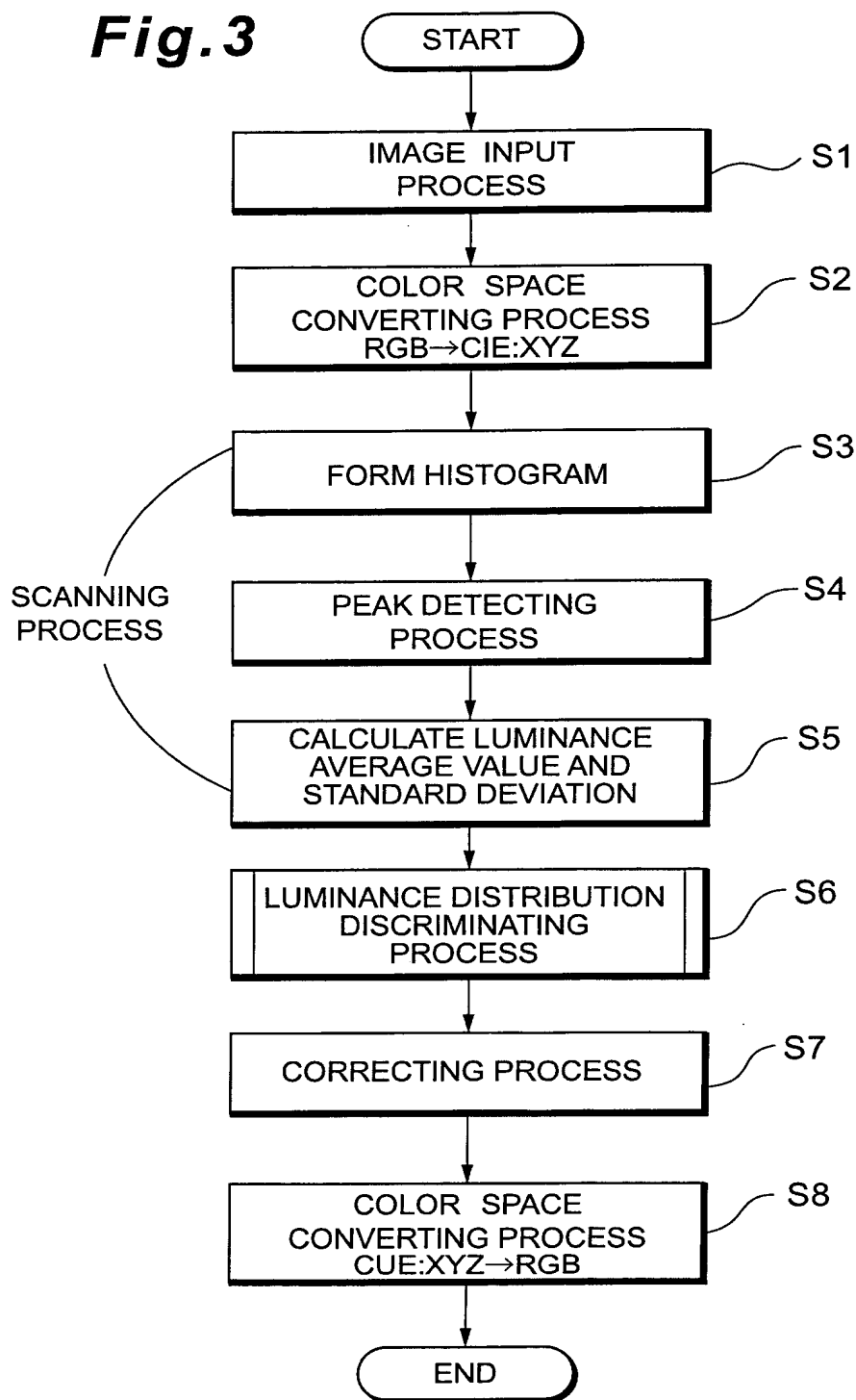
# Fig. 1





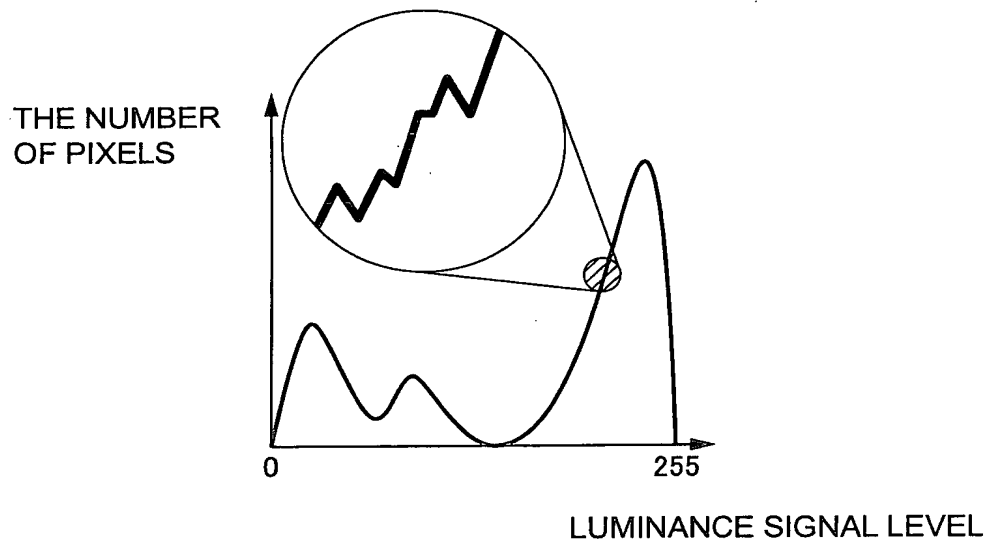
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**Fig.3**

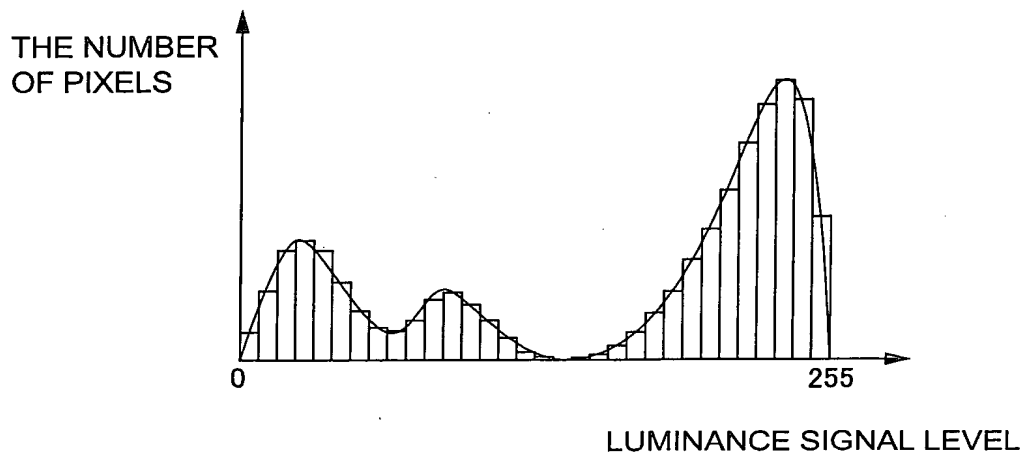


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**Fig.4**

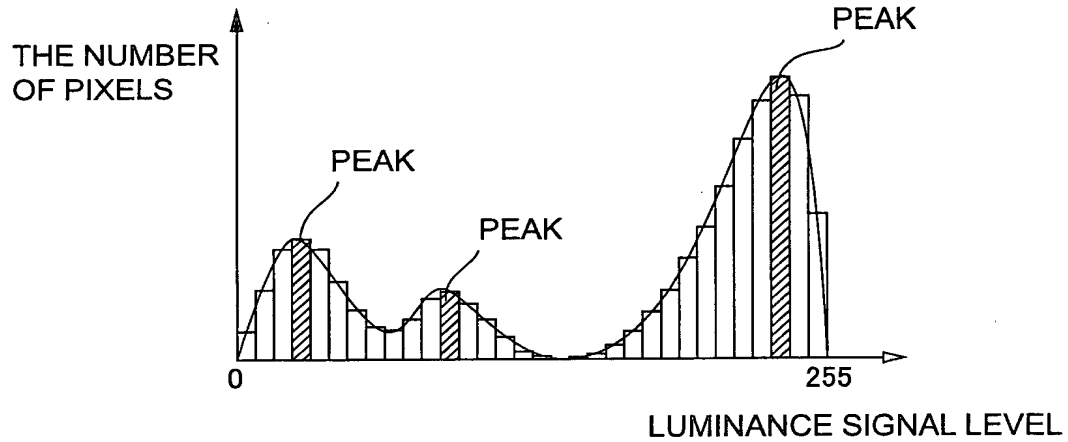


**Fig.5**

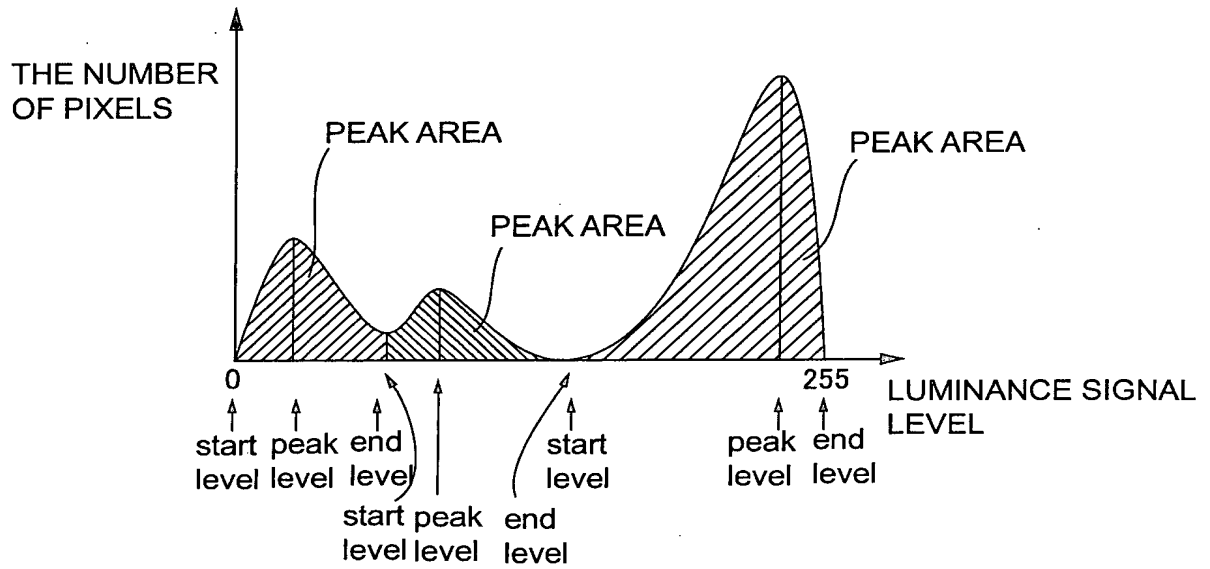


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**Fig. 6**



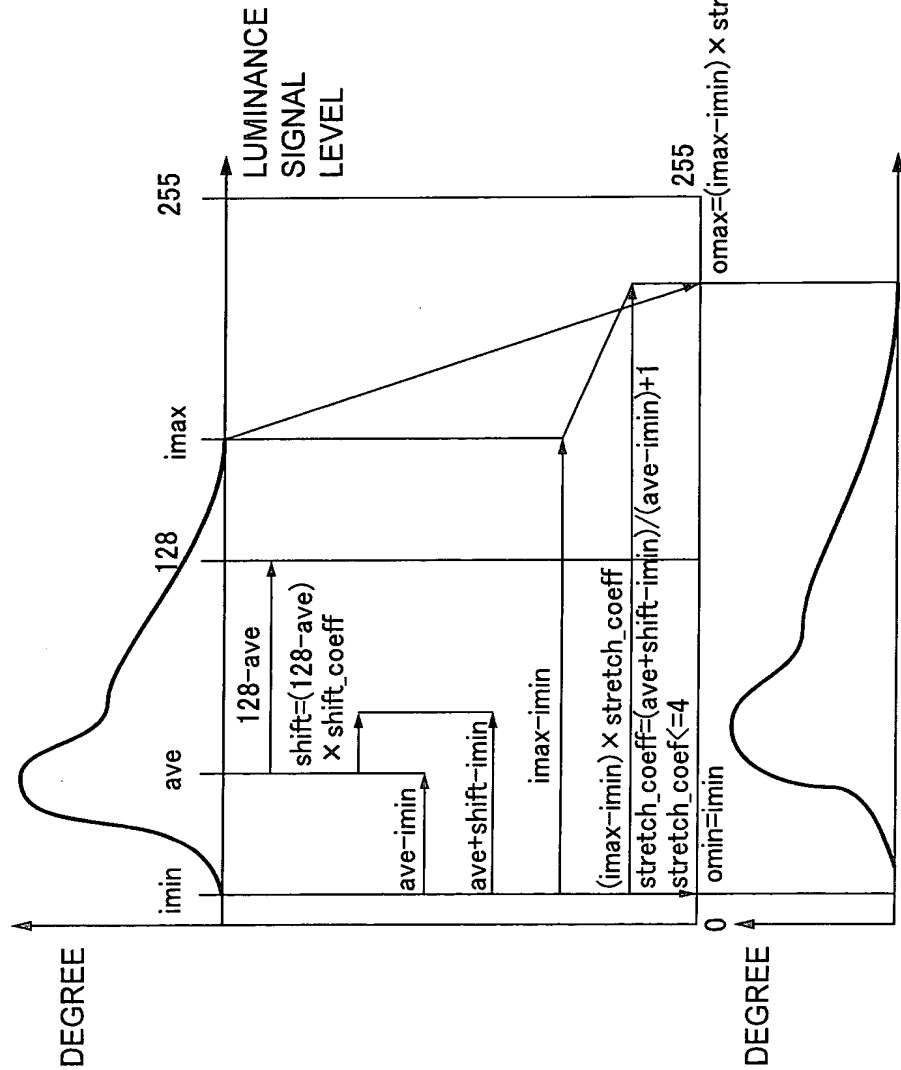
**Fig. 7**



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Fig. 8

imin: INPUT IMAGE LUMINANCE  
 MIN. VALUE  
 imax: INPUT IMAGE LUMINANCE  
 MAX. VALUE  
 ave: INPUT IMAGE LUMINANCE  
 AVERAGE VALUE  
 omin: OUTPUT IMAGE LUMINANCE  
 MIN. VALUE  
 omx: OUTPUT IMAGE LUMINANCE  
 MAX. VALUE  
 shift\_coeff: SHIFT COEFFICIENT  
 shiftf: AVERAGE SHIFT AMOUNT  
 stretch\_coeff: STRETCH COEFFICIENT  
 SET LINEAR EQUATION SO THAT  
 imin  $\rightarrow$  omin, imax  $\rightarrow$  omx  
 AND CALCULATE GRADATION  
 VALUE AFTER THE STRETCH



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Fig. 9

imin: INPUT IMAGE LUMINANCE  
 MIN. VALUE  
 imax: INPUT IMAGE LUMINANCE  
 MAX. VALUE  
 ave: INPUT IMAGE LUMINANCE  
 AVERAGE VALUE  
 omin: OUTPUT IMAGE LUMINANCE  
 MIN. VALUE  
 omx: OUTPUT IMAGE LUMINANCE  
 MAX. VALUE

shift\_coeff: SHIFT COEFFICIENT  
 shiftf: AVERAGE SHIFT AMOUNT  
 stretch\_coeff: STRETCH COEFFICIENT  
 (CONSTANT)

SET LINEAR EQUATION SO THAT  
 imin  $\rightarrow$  omin, imax  $\rightarrow$  omx  
 AND CALCULATE GRADATION  
 VALUE AFTER THE STRETCH

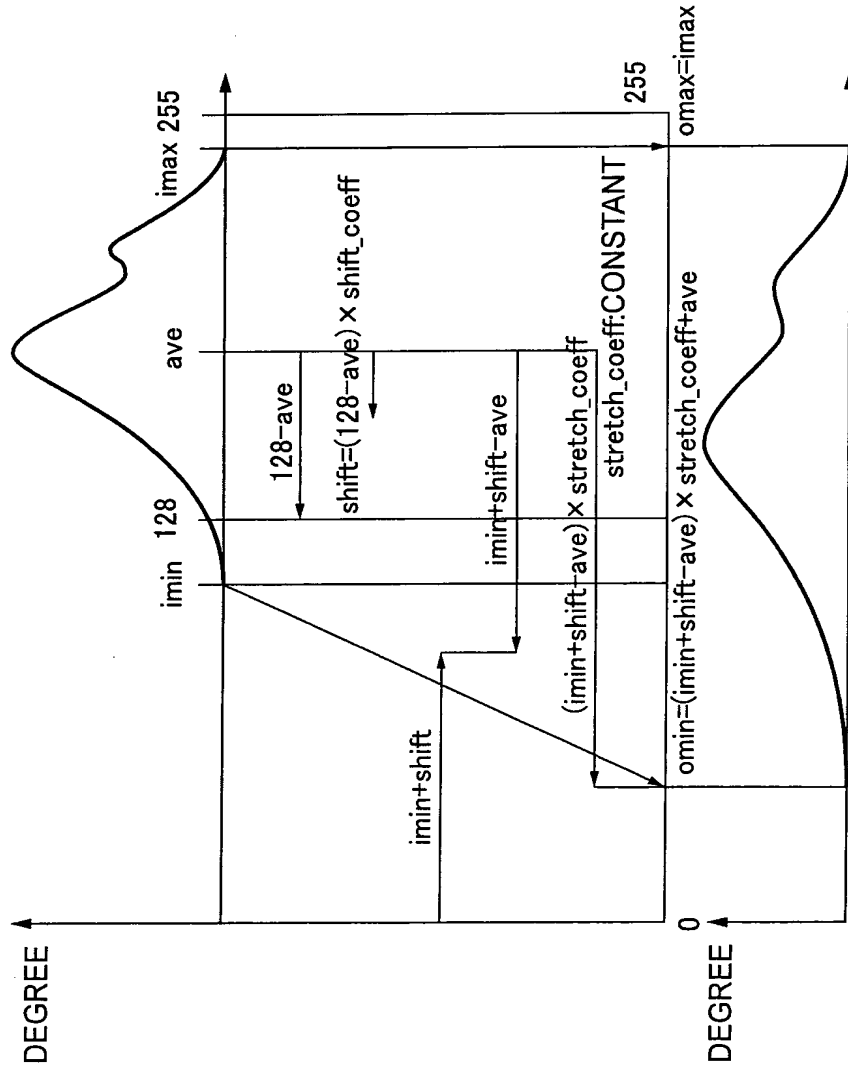
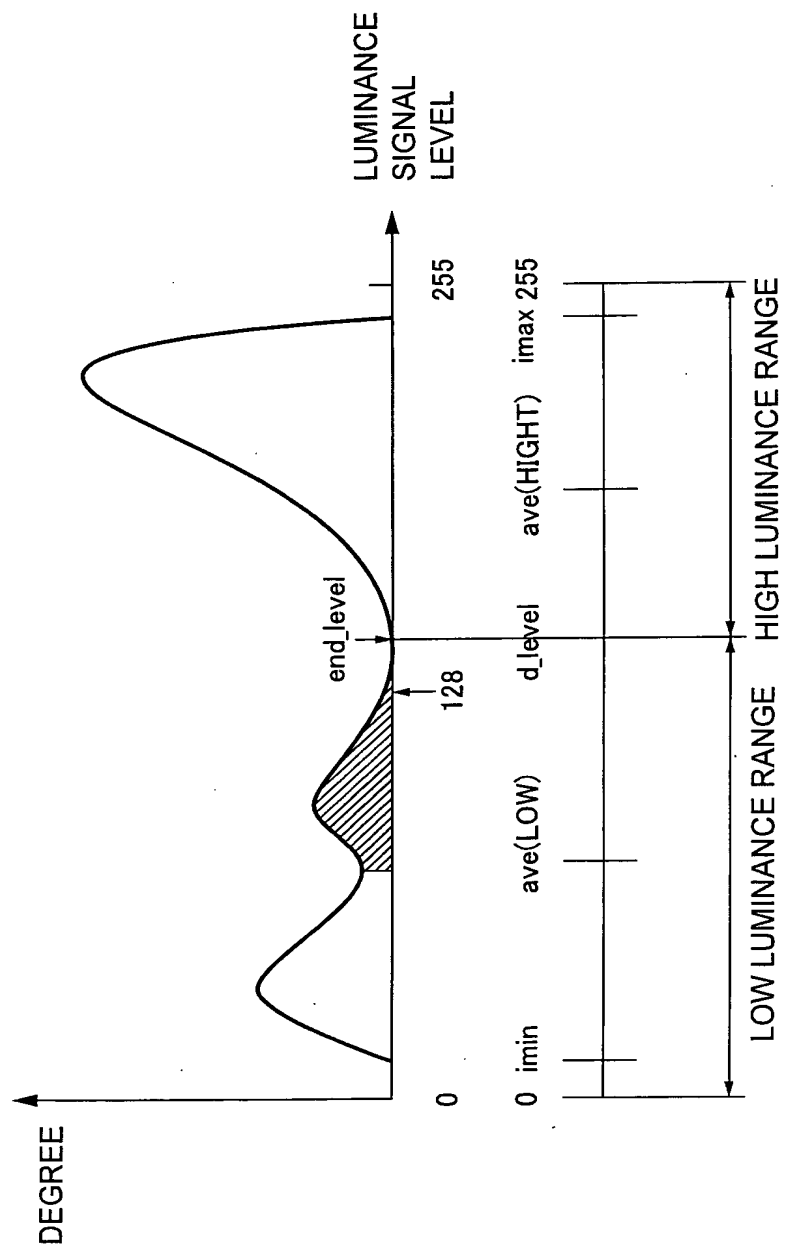


Fig.10





**Fig. 11**

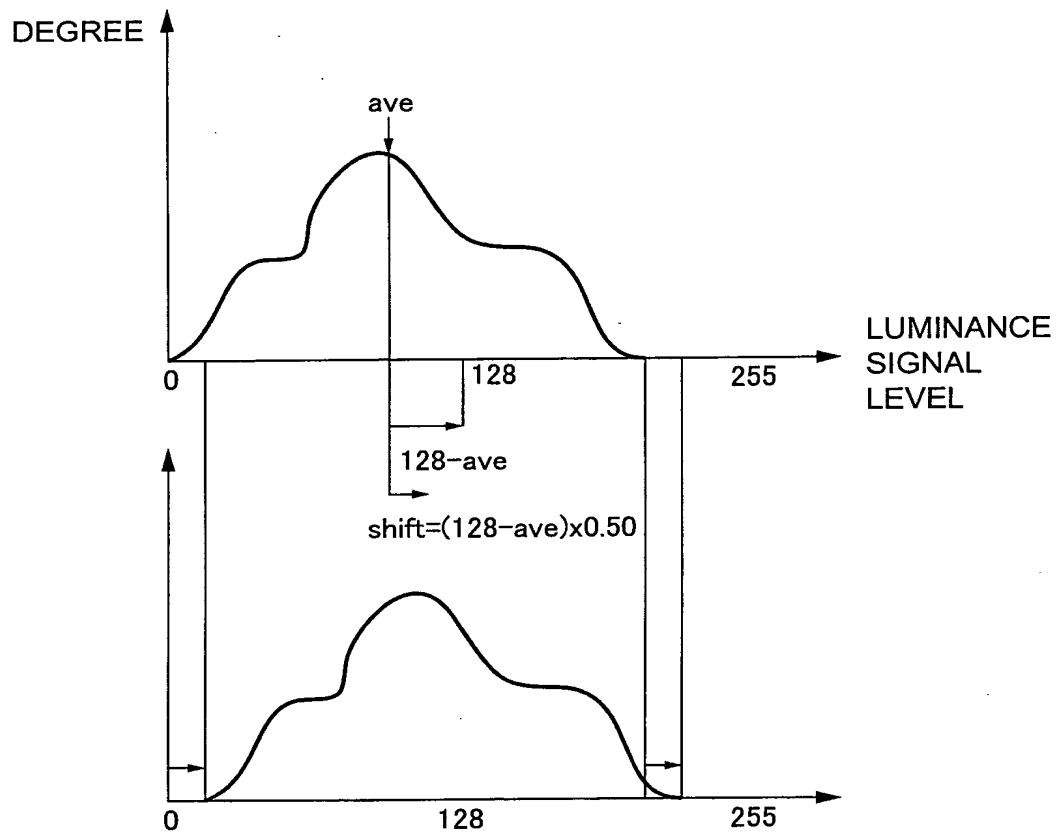
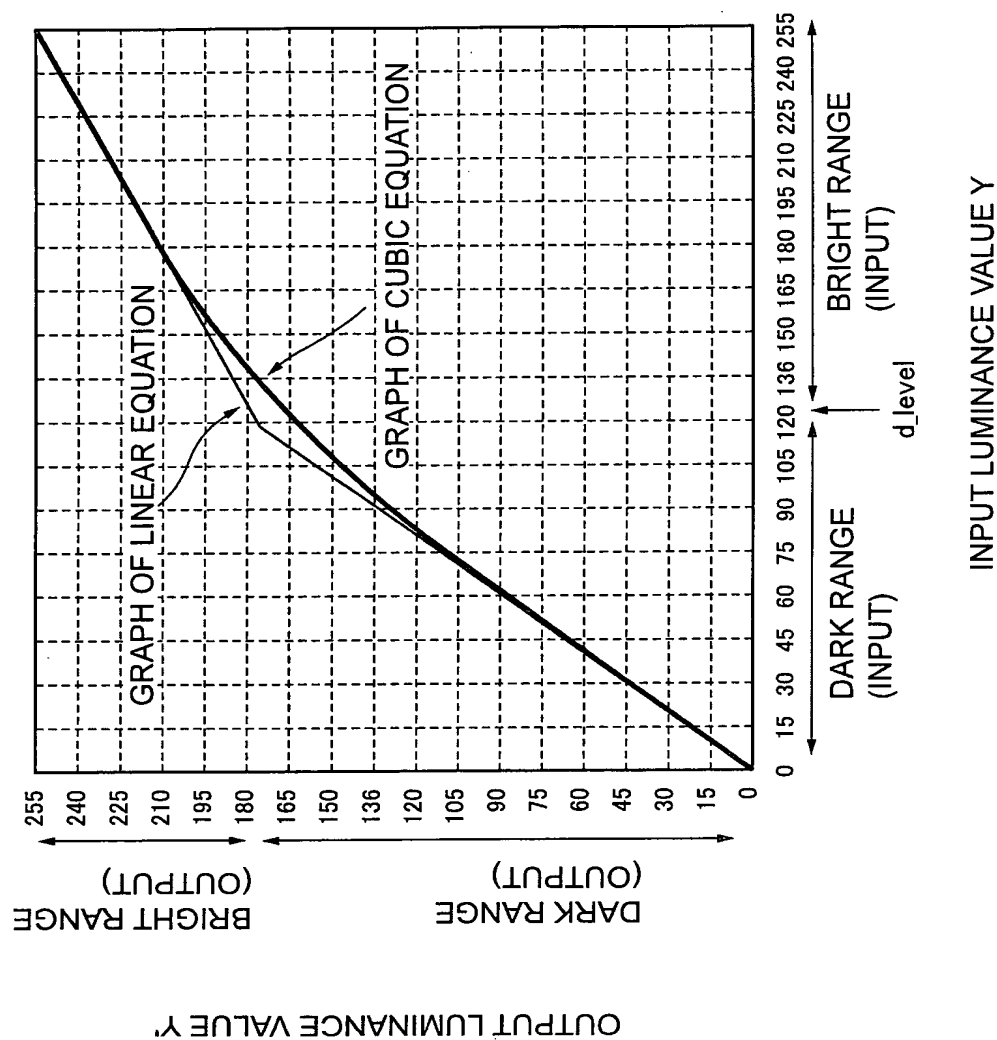
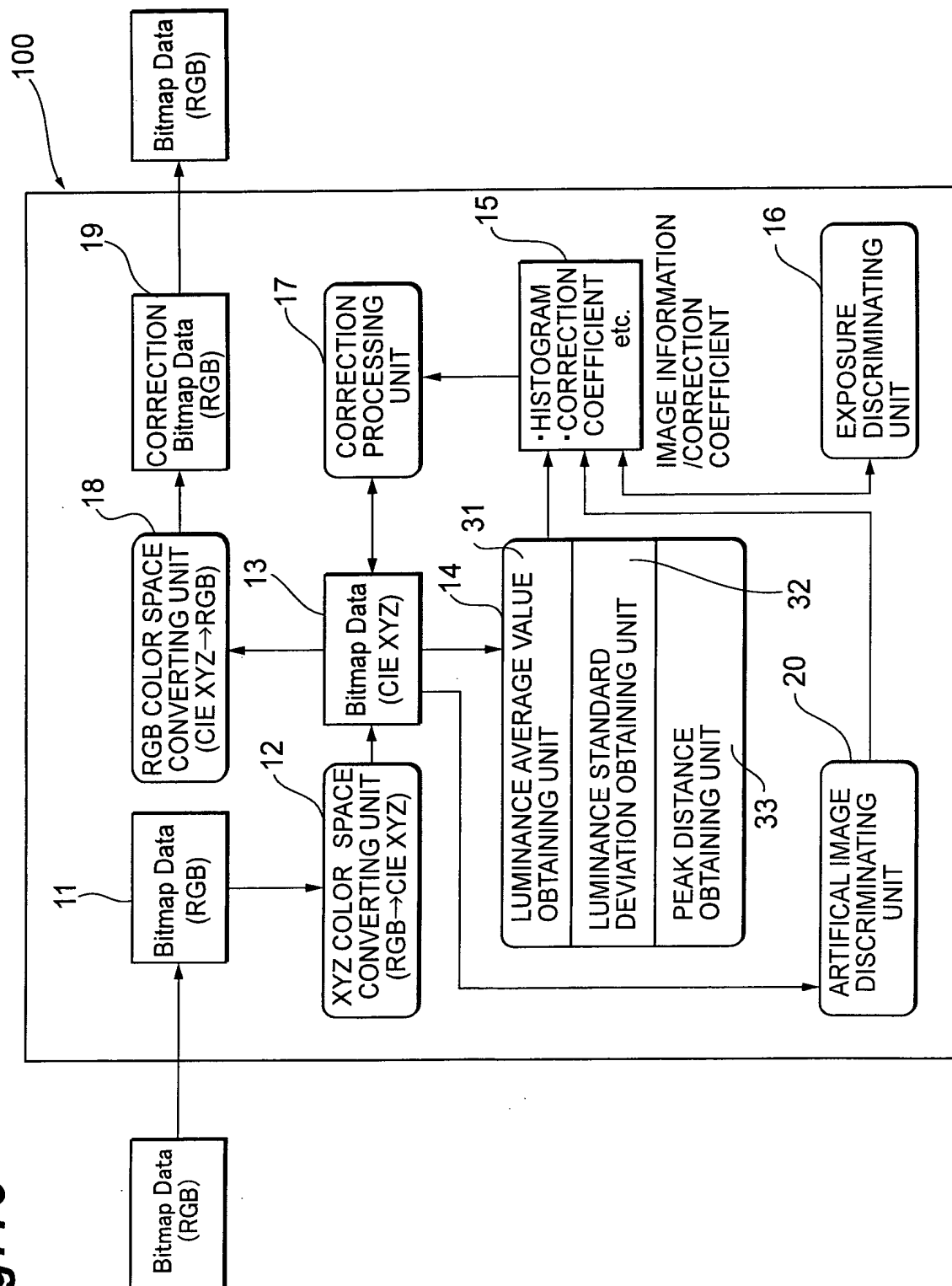


Fig. 12

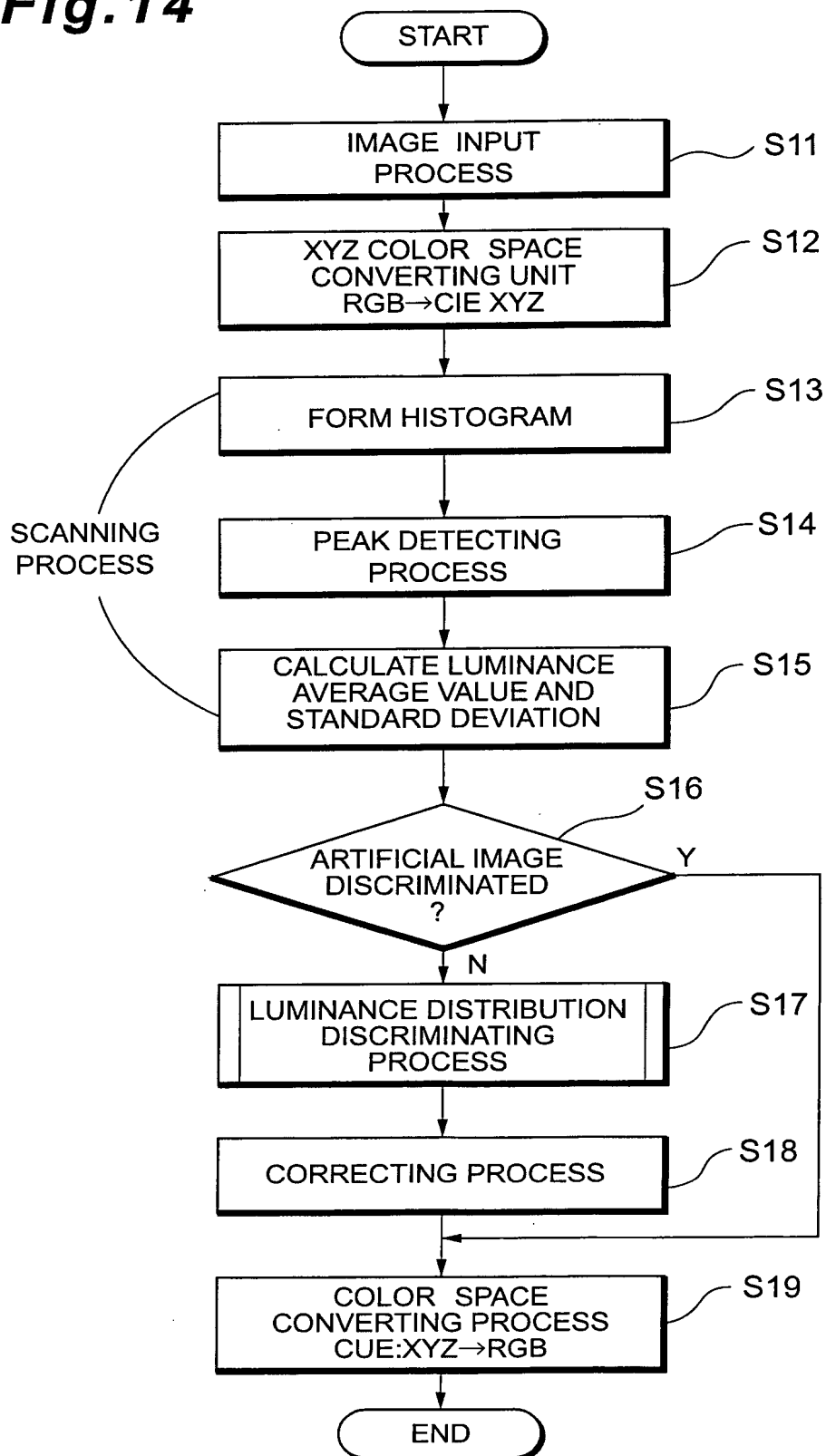


**Fig. 13**



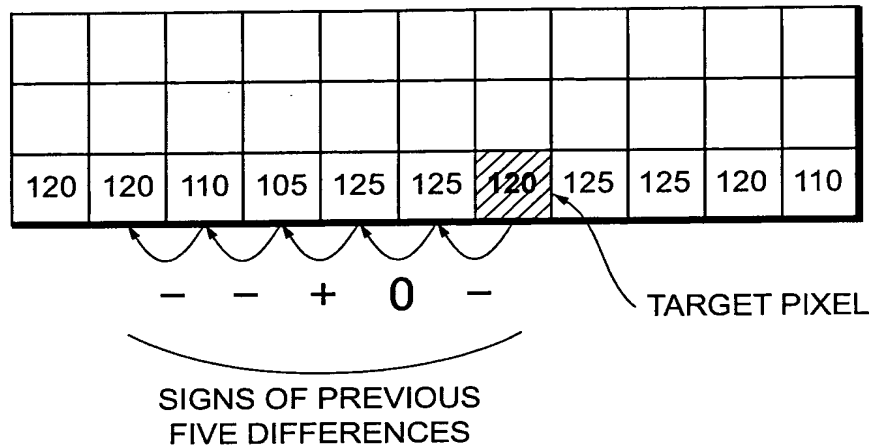
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**Fig.14**



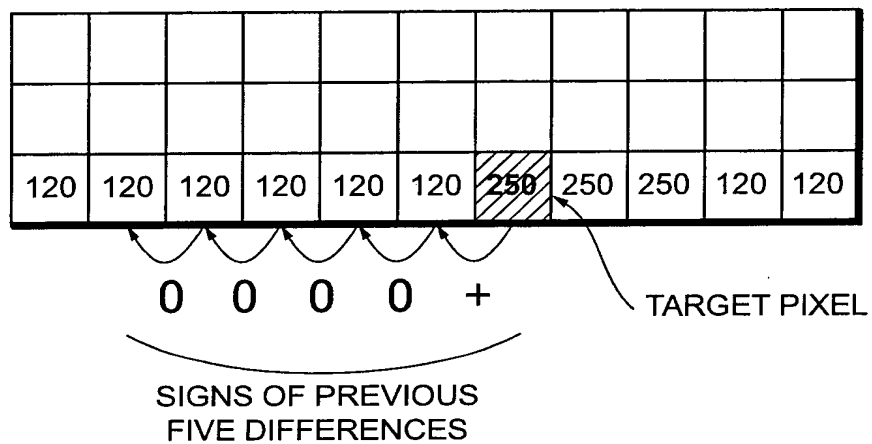
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**Fig. 15**



THERE IS THE SAME SIGN AS THAT OF DIFFERENCE  
 BETWEEN TARGET PIXEL AND PIXEL JUST BEFORE IT.  
 COUNT=COUNT+1

**Fig. 16**

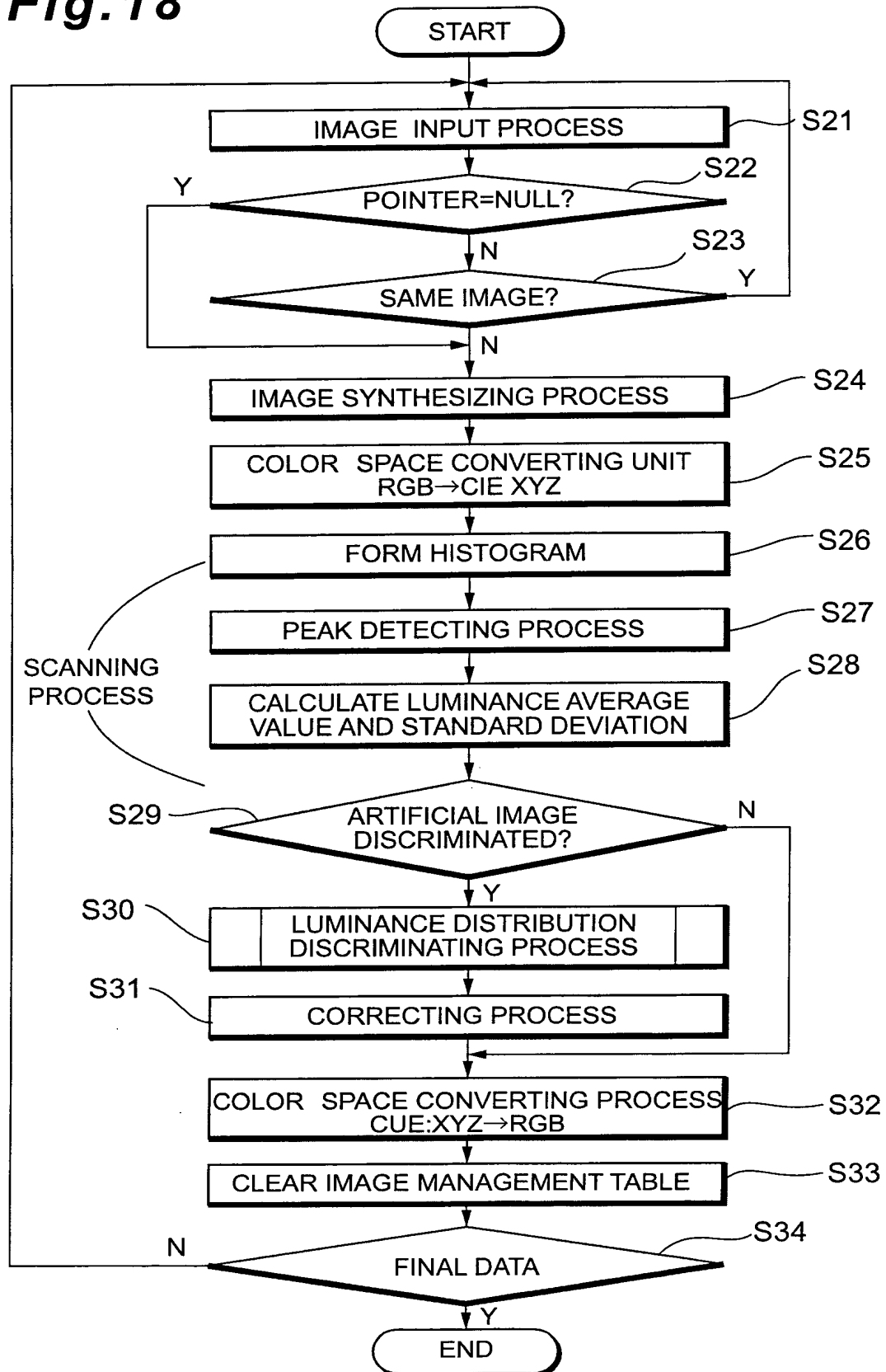


THERE IS NO SAME SIGN AS THAT OF DIFFERENCE  
 BETWEEN TARGET PIXEL AND PIXEL JUST BEFORE IT.  
 COUNT=COUNT+0



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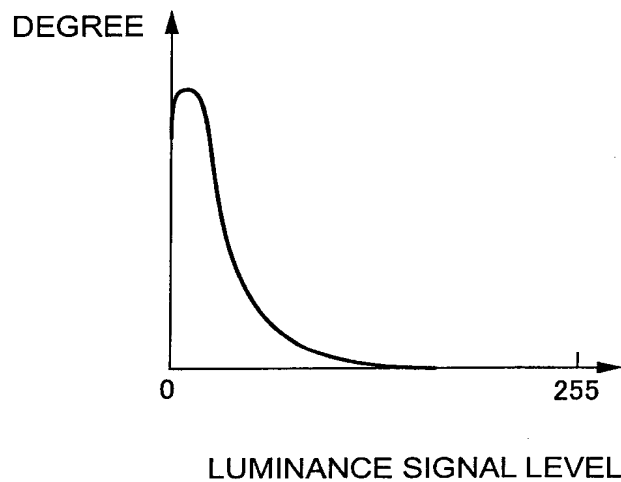
**Fig.18**



**Fig.19**

| INDEX | IMAGE<br>WIDTH | IMAGE<br>HEIGHT | ... | SAME IMAGE<br>DISCRIMINATING<br>FLAG | PROCESS<br>START<br>FLAG |
|-------|----------------|-----------------|-----|--------------------------------------|--------------------------|
| 1     | 640            | 320             | ... | 1                                    | 1                        |
| 2     | 640            | 320             | ... | 1                                    | 1                        |
| 3     | 320            | 400             | ... | 0                                    | 0                        |
| ...   |                |                 |     |                                      |                          |

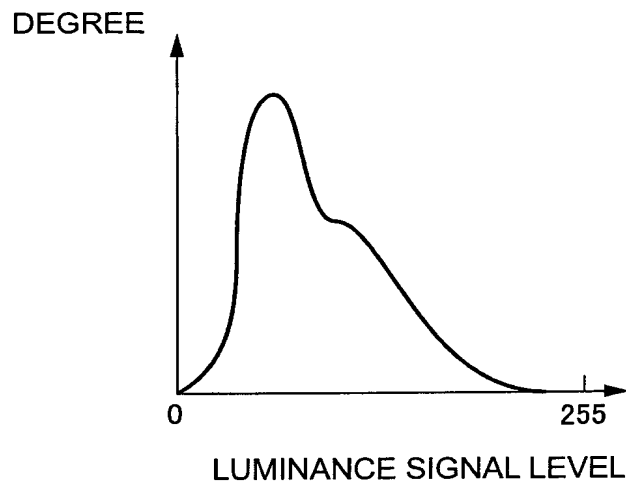
**Fig.20**



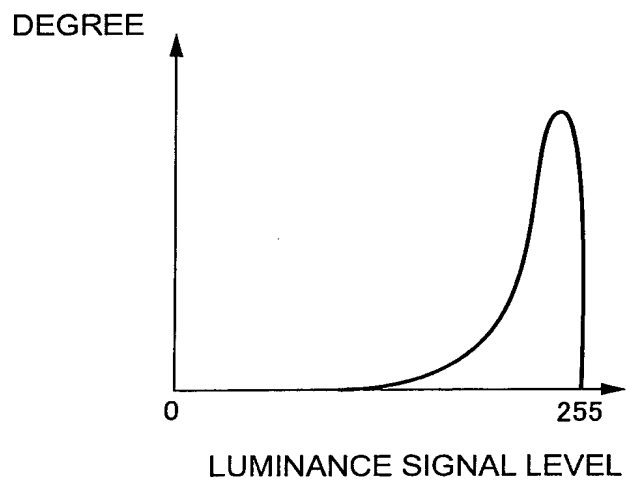


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**Fig. 21**

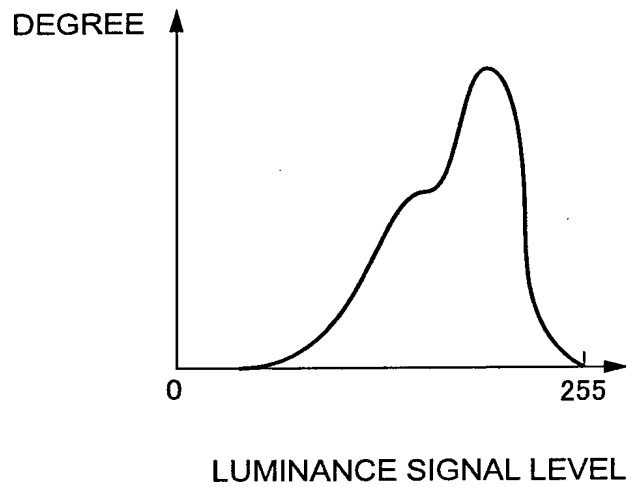


**Fig. 22**

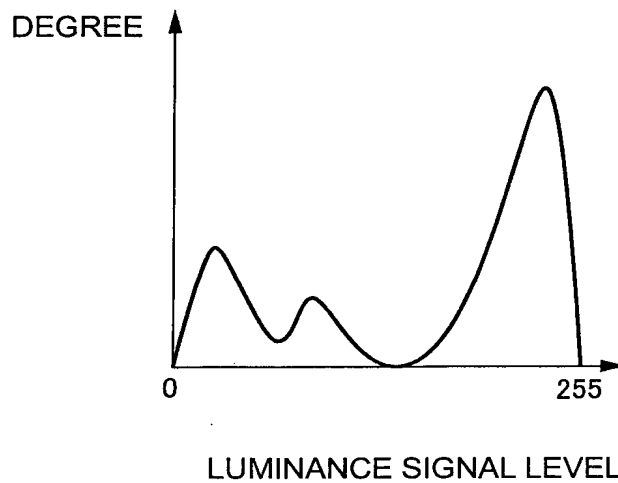


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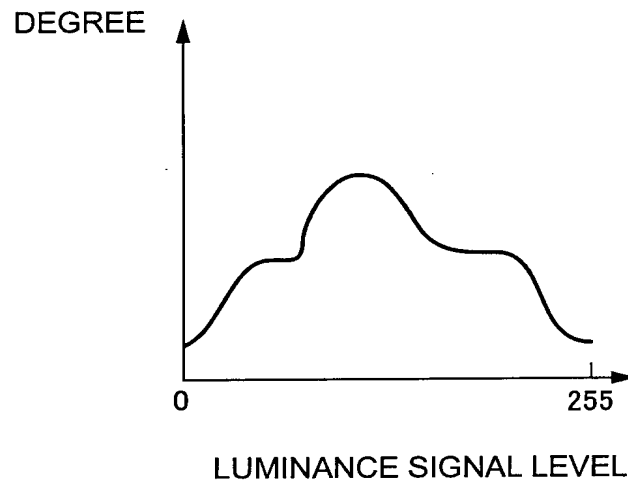
**Fig. 23**



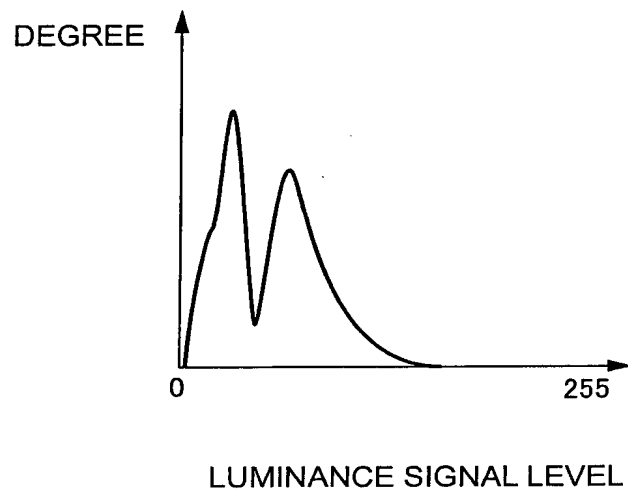
**Fig. 24**



**Fig. 25**



**Fig. 26**



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**Fig. 27**

